

IN THE CLAIMS:

Please cancel Claims 1-34.

Please add the following new claims.

35. (new) A method for increasing apoptosis of non-neoplastic ovarian epithelial cells of a female subject, comprising administering to a female subject, on a less frequently than daily basis, a dose of a Vitamin D compound in an amount effective to induce apoptosis of non-neoplastic ovarian epithelial cells of the female subject.

36. (new) The method of claim 35 wherein said dose of Vitamin D compound is administered without inducing a deleterious hypercalcemic side effect in the subject.

37. (new) The method of claim 36 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1, 25-dihydroxyvitamin D₃/kg of body weight.

38. (new) The method of claim 36 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1, 25-dihydroxyvitamin D₃ of body weight.

39. (new) The method of claim 36 wherein said dose of Vitamin D compound is 1, 25-dihydroxyvitamin D₃.

40. (new) The method of claim 36 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 400 I.U.

41. (new) The method of claim 36 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 2000 I.U.

42. (new) The method of claim 36 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 4000 I.U.

43. (new) A method for increasing apoptosis of non-neoplastic epithelial cells of a subject, comprising administering to a subject, on a less frequently than daily basis, a dose of a Vitamin D compound in an amount effective to induce apoptosis of non-neoplastic epithelial cells of the subject.

44. (new) The method of claim 43 wherein said dose of Vitamin D compound is administered without inducing a deleterious hypercalcemic side effect in the subject.
45. (new) The method of claim 44 wherein said non-neoplastic epithelial cells are breast cells in a female subject.
46. (new) The method of claim 44 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1, 25-dihydroxyvitamin D₃/kg of body weight.
47. (new) The method of claim 44 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1, 25-dihydroxyvitamin D₃ of body weight.
48. (new) The method of claim 44 wherein said dose of Vitamin D compound is 1, 25-dihydroxyvitamin D₃.
49. (new) The method of claim 44 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 400 I.U.
50. (new) The method of claim 44 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 2000 I.U.
51. (new) The method of claim 44 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 4000 I.U.
52. (new) A method for increasing apoptosis of non-neoplastic epithelial cells of a subject, comprising administering to a subject, on a periodic basis other than daily, a dose of a Vitamin D compound in an amount effective to induce apoptosis of non-neoplastic epithelial cells of the subject without inducing a deleterious hypercalcemic side effect in the subject.
53. (new) The method of claim 52 wherein said epithelial cells are ovarian cells.
54. (new) The method of claim 52 wherein said epithelial cells are breast cells.
55. (new) The method of claim 52 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1, 25-dihydroxyvitamin D₃/kg of body weight.

56. (new) The method of claim 52 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1, 25-dihydroxyvitamin D₃ of body weight.

57. (new) The method of claim 52 wherein said dose of Vitamin D compound is 1, 25-dihydroxyvitamin D₃.

58. (new) The method of claim 52 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 400 I.U.

59. (new) The method of claim 52 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 2000 I.U.

60. (new) The method of claim 52 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 4000 I.U.

61. (new) A method for administering a Vitamin D compound to a subject, the method comprising repeatedly administering doses of a Vitamin D compound to said subject, wherein a first dose of said Vitamin D compound is administered in an amount sufficient to induce apoptosis without inducing a deleterious hypercalcemic side effect, and a second dose of a Vitamin D compound is administered at an interval from the first dose such that the doses are not administered on consecutive days, said second dose in an amount sufficient to induce apoptosis without inducing a deleterious hypercalcemic side effect.

62. (new) The method of claim 61 wherein Vitamin D compound is 25-hydroxyvitamin D₃ or 1,25-dihydroxycholecalciferol.

63. (new) The method of claim 61 wherein said epithelial cells are ovarian cells.

64. (new) The method of claim 61 wherein said epithelial cells are breast cells.

65. (new) The method of claim 61 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1, 25-dihydroxyvitamin D₃/kg of body weight.

66. (new) The method of claim 61 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1, 25-dihydroxyvitamin D₃ of body weight.

67. (new) The method of claim 61 wherein said dose of Vitamin D compound is 1, 25-dihydroxyvitamin D₃.

68. (new) The method of claim 61 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 400 I.U.

69. (new) The method of claim 61 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 2000 I.U.

70. (new) The method of claim 61 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 4000 I.U.

71. A method of inhibiting conversion of non-normal non-neoplastic epithelial cells to neoplastic cells comprising administering to a subject, on a periodic basis other than daily, a Vitamin D compound in an amount effective to inhibit conversion of non-normal non-neoplastic ovarian epithelial cells to neoplastic cells without inducing a deleterious hypercalcemic effect.

72. (new) The method of claim 71 wherein Vitamin D compound is 25-hydroxyvitamin D₃ or 1,25-dihydroxycholecalciferol.

73. (new) The method of claim 71 wherein said epithelial cells are ovarian cells.

74. (new) The method of claim 71 wherein said epithelial cells are breast cells.

75. (new) The method of claim 71 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1, 25-dihydroxyvitamin D₃/kg of body weight.

76. (new) The method of claim 71 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1, 25-dihydroxyvitamin D₃ of body weight.

77. (new) The method of claim 71 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.05 to 0.1 mg/kg 1, 25-dihydroxyvitamin D₃ of body weight.

78. (new) The method of claim 71 wherein said dose of Vitamin D compound is 1, 25-dihydroxyvitamin D₃.

79. (new) The method of claim 71 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 400 I.U.

80. (new) The method of claim 71 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 2000 I.U.

81. (new) The method of claim 71 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 4000 I.U.

82. (new) A method for increasing apoptosis and reducing proliferation of dysplastic cells of a subject, comprising administering to a subject, on a periodic basis other than daily, a dose of a Vitamin D compound in an amount effective to induce apoptosis and reduce proliferation of dysplastic cells of the subject without inducing a deleterious hypercalcemic side effect in the subject.

83. (new) The method of claim 82 wherein said cells are ovarian epithelial cells.

84. (new) The method of claim 82 wherein said cells are breast cells.

85. (new) The method of claim 82 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1, 25-dihydroxyvitamin D₃/kg of body weight.

86. (new) The method of claim 82 wherein said dose of Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1, 25-dihydroxyvitamin D₃ of body weight.

87. (new) The method of claim 82 wherein said dose of Vitamin D compound is 1, 25-dihydroxyvitamin D₃.

88. (new) The method of claim 82 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 400 I.U.

89. (new) The method of claim 82 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 2000 I.U.

90. (new) The method of claim 82 wherein said dose of Vitamin D compound is administered at a dosage equivalent to at least 4000 I.U.